

of the second conductivity type, having a higher impurity concentration than the second well, formed in the second well, and connected to the second line; a fifth diffusion region of the first conductivity type, having a higher impurity concentration than the third well, formed in the first well apart from the third well, and connected to second line; and a sixth diffusion region of the first conductivity type, having a higher impurity concentration than the fourth well, formed in the second well apart from the fourth diffusion region, and connected to the first line.

In accordance with the ESD protection device of the present invention, an ESD stress can be effectively discharged between separate power source lines (such as ground lines) having an equal voltage during the normal operation of the LSI, while suppressing high-frequency noise from transferring between the separate power source lines.

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is an equivalent circuit diagram of an ESD protection circuit according to an embodiment of the present invention.

Fig. 2 is a schematic top plan view showing the layout pattern of the ESD protection circuit of Fig. 1.

Figs. 3A and 3B are sectional view taken along line A-A' in Fig. 2, and a corresponding equivalent circuit diagram, respectively.

Figs. 4A and 4B are sectional view taken along line B-B' in